# Development of laws in Australia to give protection and legal status to rabbits

### **Extract regarding Myxomatosis**





By Bryce Inglis
Vice President Rabbit Run-Away Orphanage
Co Chapter Manager House Rabbit Society Australia

The Government advocates animal cruelty to pet rabbits by denying a vaccine to pet owners, giving their carers a choice of either euthanizing their pets or allowing them to suffer a certain slow death.

Initial signs of myxomatosis in rabbits are swelling eyelids, ears and genitals. Death takes up to 14 days, a few may survive but can be expensive to maintain due to treatment for underlying illness of the upper respiratory tract. Myxomatosis is highly contagious and the disease often infects all rabbits in the household.

In Europe the vaccine has been available for decades, in the USA there is no vaccination for myxomatosis as it is not needed as a bio control agent. Myxomatosis is not fatal for their wild rabbit, the American Cottontail.

Statement from the Chief Veterinary Officer (Australia) on myxomatosis vaccine availability in Australia, 29 April 2013

#### Information on myxomatosis vaccine availability in Australia

The Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) has received enquiries from veterinarians and rabbit owners about the availability of a vaccine to provide protection against myxomatosis. No vaccines for myxomatosis are currently registered for use in Australia, but other preventative measures can be taken. These include protecting pet rabbits from mosquitoes and fleas which spread the disease. Answers to frequently asked questions about myxomatosis are provided below.

Rabbit owners should ask their veterinarian for more information and advice.

**Please note:** If you live in Queensland it is illegal for you to keep a pet rabbit. Visit the **Queensland Government Department of Agriculture**, **Fisheries and Forestry website** for more information.

#### Frequently asked questions

### 1. Vaccines are available in other countries, why aren't they available here?

Government answer: The myxomatosis vaccines that have been available overseas are live attenuated vaccines (also known as 'modified live' vaccines). The virus in these types of vaccines may spread from vaccinated rabbits into the wild rabbit population which could allow wild rabbits to increase their immunity to myxomatosis. If this happened, there would be a dramatic increase in the number of wild rabbits in Australia, which would cause major damage to the environment and economic losses.

According to this response the Chief Veterinary Officer (Australia) would also feel there is no need for people to vaccinate against Mumps Measles and Rubella as this is also a live vaccine. Surely since the Mumps Measles and Rubella vaccines introduction in 1978 enough people have been being bitten by mosquitoes during the summer months to spread this vaccine thus making present day inoculation unnecessary. Myxomatosis vaccine has been used elsewhere without any increase to feral rabbit immunity. Perhaps The CVO should stop using 1950 science and catch up.

### 2. How would the myxomatosis virus spread from a vaccinated pet rabbit to a wild rabbit?

Government answer: When a rabbit has been vaccinated with a modified live vaccine, there may be enough of the vaccine virus in their skin for it to be spread from one rabbit to another by the bites of mosquitoes and fleas.

Has the Chief Veterinary Officer (Australia) any documented evidence to support this claim? Can he cite any evidence anywhere in the world that this has occurred? If the Government had any proof of a documented case of this happening then it would be published "there may be enough of the vaccine virus" is not stating that proof exists.

The government relied heavily on CSIRO research which does not prove that vaccination can spread from one rabbit to another and they rely on an unproven concern that mosquitoes and fleas can spread the vaccine from one animal to another.

"Concern exists that they could potentially spread from vaccinated rabbits into the wild rabbit population and interferes with biological control" Wild (2011) CSIRO Fact Sheet Myxomatosis and Rabbits in Australia today

Correspondence from Corné Loots, Business Unit Manager, Intervet/Schering-Plough Animal Health Australia, who has consulted with the parent company in the UK, MSD Animal health, and manufacturer of a myxomatosis vaccine is as follows:

"The virus undergoes some local multiplication at the site of inoculation however it doesn't seem to spread beyond there and no virus has been found in the blood. This means that although it is theoretically possible for a biting insect to pick up the virus it would only be from any tissue picked up incidentally from the site and not in the blood itself. In terms of the minimum infectious dose this would make it highly improbable that any biting insect could actually spread infection to other rabbits and so the risk of spread will to all practical intents and purposes be nil."

So the mosquito has to find an individual vaccinated pet rabbit amongst a multitude of feral rabbits, the mozzie has to do this within a few hours of vaccination, bite exactly at the puncture wound, and extract enough vaccine to be effective. The mosquito has to do this within 3 days which according to CSIRO research is the average time before death of the domestic rabbit due to predation, bio control or other reason.

#### 3. What if I have my pet rabbit desexed?

Government answer: Desexing does not prevent the spread by biting insects of vaccine virus between rabbits.

Perhaps the Chief Veterinary Officer (Australia) is possibly influenced by trials of immunocontraception, that as a side effect be evidence for female wild rabbits having a longer lifespan than those able to give birth. Whilst this is seen as a desirable benefit to pet owners it is not a good characteristic for bio control methods.

Compulsory desexing of domestic rabbits would have the following benefits.

- The rabbit would cost more to purchase and be more valued in monitory terms so that it is less likely to be disposed of. It would reduce the purchase of a pet rabbit without thought.
- Desexing modifies the rabbits behaviour reducing undesirable characteristics such as spraying, chewing, marking territory or roaming, so that some reasons for dumping are removed.
- Dumped rabbits do not have the ability to reproduce adding further offspring to wild populations,

#### 4. What about new vaccines?

Government answer: As vaccine technology changes, new vaccines may become available that provide protection to domestic rabbits but do not have the potential to increase the immunity of wild rabbit populations to myxomatosis. The vaccine manufacturer could then apply to register the product for use in Australia. Australian Government agencies, including DAFF, would then need to consider whether to approve its use. This would involve assessing any possible risk to human and animal health, and to the environment.

Government funding for Australian researchers who were working on a Genetically Modified myxomatosis virus that would spread from rabbit to rabbit resulting in sterility of females as a method to eradicate rabbits and other more humane methods of bio control was discontinued. The Australian government stopped funding CSIRO for Myxomatosis vaccine research in 2005 resulting in CSIRO stopping government funded research even though their Genetically Modified virus causing infertility is the preferred method of control of the Australian public.

Among the Australian respondents, the methods acceptable to the majority were a GE

Infertility virus (acceptable to 84%), shooting and hunting (70%), RCD (62%) and warren

Destruction (60%). Myxomatosis and poisoning were not acceptable to the majority.

All the control methods were more acceptable to rural respondents than urban respondents.

When RCD was specified in more detail, its acceptability rose to 68% among Australians.

13% of Australians said they were not able to decide. The authors of the study noted that

females aged between 16 and 50 were the most likely to oppose RCD.

(Roy Morgan Research Centre 1995).

Fitzgerald, 2009, Public attitudes to current and proposed forms of pest animal control

So Why Mr Chief Veterinary Officer (Australia) did your employers stop funding to the CSIRO for a bio control method causing sterility in 2005, a product capable of successful marketing worldwide, selling a product that is the preferred control method indicated by 84% of surveyed Australians. Any salesman will simply say give the public what they want. Myxomatosis and poisoning were not acceptable to the majority, so supply the market with the preferred product.

#### 5. What can I do to protect my rabbit?

Government answer: Because the virus is spread from one rabbit to another by mosquitoes and fleas, protecting rabbits from these insects by using mosquito-proof hutches and powders or sprays could help prevent myxomatosis. Your veterinarian can provide you with further advice.

Does the Chief Veterinary Officer (Australia) believe that all rabbits are kept in hutches? Even house rabbit's occasionally get Myxomatosis due to difficulty in keeping mosquitoes outside.

You can protect your rabbit by getting out of bed in the middle of the night because you hear a mosquito in order to hunt it down, by living with fear of myxomatosis disturbing your peace of mind.

From a letter to the Herald Sun. Dr Gerry Skinner BSc, BVSc, PhD, MRCVS, MACVSc (ECC) of Melbourne Posted at 10:38 AM March 16, 2013 Comment 73 of 124

Hi, I'm a vet. Yet again this week I had to explain to a sobbing 7 year old girl and her parents why her much loved pet needed to be euthanized. Myxomatosis - a horrible disease with a lingering certain death. I deal with death on a daily basis - and euthanasia can be a gift to the suffering - but how do I explain that her bunny did not need to die? That there is a safe vaccine that can stop this horrific

disease? That our government thinks this act of cruelty in withholding the vaccine is in our interests? That they think it controls the wild rabbit population (it doesn't) and the lives of our furry children are worth this? Walk in my shoes for a week, politicians - you try and explain it to the owners, you kill the suffering and helpless pets in front of their owners, you explain the cruelty - I have run out of excuses for you.

### 6. Why do we still need to use myxomatosis to help control feral rabbits?

Government answer: In Australia, wild rabbits cause major damage to the environment (such as soil erosion, weed invasion and competition against native species for habitat) and cost Australian agriculture an estimated \$206 million in annual losses. Wild rabbits have been implicated in broad scale land degradation, the near-extinction or extinction of small native mammals and plants and are a food source for other introduced pests such as the European red fox and the feral cat.

A proportion of the wild rabbit population has developed genetic resistance to the introduced myxoma virus. Despite this, the virus remains an important measure in keeping wild rabbits under control so that native biodiversity can be protected.

Due to evolution there are claims of survival of feral rabbits and new strains are needed to combat the effectiveness of the Myxomatosis virus in killing wild populations. The truth is that there are no survivors; there are increasing numbers of sick feral rabbits. Feral rabbits that do not die quickly suffer long term discomfort and pain from upper and lower respiratory diseases and cause a lingering slow death.

The Chief Veterinary Officer (Australia) is obliged to follow the Australian Veterinary Association Code of Professional Conduct which states that veterinarians should:

- Always consider the health, welfare and respectful treatment of the animal.
- Control of native and introduced animals causing damage to agriculture or habitat: The AVA supports harvesting and culling of pest and native and introduced animals causing damage to agriculture or habitat provided that this is done humanely and after appropriate public consultation.
- Pain and analgesia: Every attempt should be made to prevent or alleviate pain in animals unless there are compelling reasons to withhold treatment.

- **Genetic manipulation:** The AVA believes modern techniques of genetic manipulation represent valid extension of traditional methods of genetic manipulation of micro-organisms, plants and animals.
- Genetically modified organisms: The AVA cautiously accepts the development and use of GMOs provided they are intended for community benefit and the process is subject to assessment, consultation and regulation. The development and use of GMOs must demonstrate full consideration of animal welfare, ethical and environmental concerns at every stage.
- **Guidelines for humane slaughter and euthanasia:**The prime consideration must be for a rapid and painless death for the animal reflecting the choice of method and the skill of the person/s involved.
- Philosophy on animal welfare and the veterinarian:
   Veterinarians have particular skills and a professional
   responsibility to see that animals owned by and/or
   controlled by humans receive adequate care.
- Statement of professional dedication for veterinarians: Provides a statement of professional dedication that seeks the enhancement of animal health and welfare, the relief of animal suffering and the advancement of veterinary knowledge.

Is the Chief Veterinary Officer (Australia) in breach of the AVA code? Is the Chief Veterinary Officer (Australia) a vet or a government lackey?

The Government also has published information that disputes the claims of the Chief Veterinary Officer (Australia).

Extract from Managing Vertebrate Pests: Rabbits Kent Williams, Ian Parer, Brian Coman, John Burley and Mike Braysher

Australian Government Publishing Service Canberra 1995

#### 5.7 Pet rabbits

The size and value of the pet rabbit trade in Australia is poorly documented. Although some states and territories require permits to keep pet rabbits, there is no evidence that pet rabbits pose a threat to the effective management of wild rabbits. There are few data to support the argument that escaped or released pets will add to the 'fitness' of wild rabbits. Escaped pets will quickly fall prey to predators or die from myxomatosis. Nonetheless, there is likely to be a strong case for excluding pet rabbits from areas where management has reduced

rabbits to very low densities, or where local eradication has been achieved. Domestic-type rabbits can sometimes establish in the wild (for example, Rolls 1969), but they eventually die out, except on some islands.

Increased popularity of pet rabbits may cause the general public to become more favourably disposed towards rabbits. This may make it more difficult to educate the community about the need for rabbit management. When a child's pet rabbit succumbs to myxomatosis, there is often a strong family reaction against the use of the disease in Australia. Greater community awareness and understanding of the impact of rabbits on natural environments and agriculture in Australia is needed to counteract these attitudes.

Taking the above arguments bit by bit

 The size and value of the pet rabbit trade in Australia is poorly documented.

That can easily be rectified by census. Other questions that could be asked about public feelings towards animal welfare.

 Although some states and territories require permits to keep pet rabbits, there is no evidence that pet rabbits pose a threat to the effective management of wild rabbits.

So much for the Chief Veterinary Officer (Australia) claims that). "The virus in these types of vaccines may spread from vaccinated rabbits into the wild rabbit population which could allow wild rabbits to increase their immunity to myxomatosis."

• There are few data to support the argument that escaped or released pets will add to the 'fitness' of wild rabbits. Escaped pets will quickly fall prey to predators or die from myxomatosis.

So much for the fears of the Queensland grazier's community and others that domestic rabbits will overrun the country.

 Nonetheless, there is likely to be a strong case for excluding pet rabbits from areas where management has reduced rabbits to very low densities, or where local eradication has been achieved.

It is very unlikely that domestic rabbits would survive in an area made rife with biological controls such as Myxomatosis to which they have no immunity.

 Domestic-type rabbits can sometimes establish in the wild (for example, Rolls 1969), but they eventually die out, except on some islands. We agree with this statement, apparently the Chief Veterinary Officer (Australia) doesn't. There are semi protected islands where rabbits exist for longer such as public golf courses, parkland and areas in Victoria, such as docklands and under the West Gate Bridge and this problem can be minimised by education and subsequent increase in responsible ownership practices such as microchipping and desexing.

 Increased popularity of pet rabbits may cause the general public to become more favourably disposed towards rabbits. This may make it more difficult to educate the community about the need for rabbit management.

The Government believes that pet rabbit owners are unable to differentiate between domestic and feral rabbits. This is a pretentious statement, treating the public in an arrogant manner. Farmers set apart working and wild dogs but are unable to differentiate between domestic and wild rabbits. Will dog owners who are a much larger group become more favourably disposed to foxes, dingos or feral dogs? Are Cat owners unable to differentiate between domestic and feral cats? Choosing to have a pet enhances education about animals. This also applies to rabbits.

• When a child's pet rabbit succumbs to myxomatosis, there is often a strong family reaction against the use of the disease in Australia.

No, this causes a strong feeling about the Government decision to ban a preventative vaccine to protect their pet.

We understand the need for bio control but expect to protect our pets that, in many cases are sole companion, substitute child or are considered part of the family. I can't imagine a bio control being released for dogs without protection for pet dogs due to the expected public outcry that would follow from dog owners.

 Greater community awareness and understanding of the impact of rabbits on natural environments and agriculture in Australia is needed to counteract these attitudes.

Just in Victoria alone there are a multitude of organisations such as Landcare and other community based groups and networks, local government, CMA's, Parks Victoria, DEPI, VicRoads, VicTrack, water authorities, environmental consultants, pest controllers, research groups, Rabbit Free Australia and more giving greater awareness of the feral rabbit problem to the community. These groups have little regard or care for the pet rabbit and there are few voices to speak for the pet rabbit.

## Should the 40-year-old practice of releasing virulent myxoma virus to control rabbits (Oryctolagus cuniculus) be continued?

D. Berman A E, P. J. Kerr B, R. Stagg B C, B. H. van Leeuwen B C, T. Gonzalez D

<sup>&</sup>lt;sup>A</sup> Robert Wicks Pest Animal Research Centre, Natural Resources and Mines, 203 Tor Sreet, Toowoomba, Qld 4350, Australia.

<sup>&</sup>lt;sup>B</sup> Pest Animal Control Cooperative Research Centre, CSIRO Sustainable Ecosystems, GPO Box 284, Canberra, ACT 2601, Australia.

Wildlife Research 33(7) 549–556 http://dx.doi.org/10.1071/WR05004 Submitted: 11 January 2005 Accepted: 11 August 2006 Published online: 15

November 2006

#### Abstract

Release of virulent myxoma virus has been a key component of rabbit-control operations in Queensland, Australia, since the 1960s but its use rests on anecdotal reports. During a routine operation to release virulent myxoma virus we found no evidence to support the continued regular use of the technique in south-west Queensland. Radio-tagged rabbits inoculated with virulent myxoma virus contracted the disease but failed to pass enough virus to other rabbits to spread the disease. Rabbits with clinical signs of myxomatosis that were shot were infected with field strain derived from the original laboratory strain released in 1950 rather than the virulent strain that has been released annually. **There** was no change in rabbit survival or abundance caused by the release. Nevertheless, the release of virulent virus may be useful against isolated pockets of rabbits mainly because field strains are less likely to be present. Such pockets are more common now that rabbit haemorrhagic disease virus is established in Queensland.

The effectiveness of the Myxoma virus has reduced due to natural selection amongst feral rabbits whilst domestic rabbits have no immunity. Whilst rates of effectiveness of Myxomatosis infection decrease with feral rabbits the death rate of affected domestic rabbits will remain at close to 100% due to their carers euthanizing their pets to prevent pain and suffering or lack of funds or ability to give intensive treatment which has an outcome of a few recovering that usually require ongoing care due to illness caused by secondary infection.

Will the Chief Veterinary Officer (Australia) continue blocking the release of vaccination for domestic pets and practice cruelty to pet carers including children? Will the Chief Veterinary Officer (Australia) continue use of Myxomatosis without a vaccine until a stage is reached when the only rabbits killed are domestic pets?

<sup>&</sup>lt;sup>c</sup> School of Biochemistry and Molecular Biology, Faculty of Science, Australian National University, Canberra, ACT 0200, Australia.

<sup>&</sup>lt;sup>D</sup> School of Archaeology and Anthropology, Australian National University, Canberra, ACT 0200, Australia.

E Corresponding author. Email: <a href="mailto:david.berman@nrm.qld.gov.au">david.berman@nrm.qld.gov.au</a>